

position detecting means for detecting a current position of said second vehicle;

calculating means for calculating a distance between said first vehicle of said apparatus and said second vehicle based on said current position of said second vehicle and said position information corresponding to said current position of said first vehicle; and

output control means for outputting said alarm information when said output control means determines that said calculated distance is within a predetermined distance less than an effective range of said transmitting means.

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could.

REMARKS

Claims 1-16 remain in the application with claims 1, 2, and 9 having been amended hereby.

Reconsideration is respectfully requested of the objection to claim 2 as containing an informality.

The typographical error appearing in claim 2 has been corrected hereby.

Reconsideration is respectfully requested of the rejection of claims 1, 4, 9, and 12 under 35 USC 102(e), as being anticipated by Smith.

The present invention is intended to provide an alarm system communicating between two vehicles and in which one

vehicle can issue or transmit an alarm including positional information and alarm information that is then received by a receiving vehicle that also knows its our position. One feature of the present invention is that the actual distance between the two vehicles is calculated so that it can be determined whether an alarm should be sounded to the receiving vehicle. This calculation is based upon the known current position of the receiver, as well as the transmitted current position of the transmitter. Only upon being determined that the transmitter is within the predetermined distance from the receiver will the operator of the receiver be notified of the alarm condition. This excludes other vehicles within the transmission range of the transmitter but outside of the predetermined distance.

Claims 1 and 9 have been amended hereby to emphasize the above-noted features of the present invention.

Smith relates to a radio warning system that is intended to broadcast a warning signal to all receivers located within a transmitting range of the warning vehicle or in other words, the emergency vehicle. Smith clearly discloses at column 4 commencing at line 15 and at column 6 commencing at line 8 that all of the receivers located within the transmitter's effective range receive the warning signal and advise the operators of the receivers of the transmission of that warning

signal.

Smith is completely silent concerning the feature of the present invention in which, in order to prevent receivers outside of a predetermined distance from receiving the warning signal, that the distance between the transmitter and the receiver is first calculated before it is determined that a warning should be provided to the operator of the receiving vehicle.

Accordingly, it is respectfully submitted that Smith fails to anticipate the present invention, as recited in claims 1 and 9, for example.

Reconsideration is respectfully requested of the rejection of claims 2, 3, 8, 10, 11, and 16 under 35 USC 103, as being unpatentable over Smith in view of Watanabe.

Watanabe is cited to disclose a warning system in which a sound image of a position corresponding to a detected obstacle is provided to the user of the warning system. Nevertheless, it is respectfully submitted that Watanabe fails to disclose the feature of the present invention concerning calculating whether a predetermined distance exists between a transmitter and a receiver, as taught by the present invention and as recited in the amended claims.

Reconsideration is respectfully requested of the rejection of claims 5 and 13 under 35 USC 103, as being

unpatentable over Smith in view of Sadler.

Sadler is cited for its disclosure of an audible warning signal, such as a whistle or a siren. Nevertheless, Sadler does not disclose the feature of the present invention relating to determining whether the transmitter is a predetermined distance from the receiver before providing the warning signal to the receiver vehicle, as taught by the present invention and as recited in the amended claims.

Reconsideration is respectfully requested of the rejection of claims 6 and 14 under 35 USC 103, as being unpatentable over Smith in view of Reeves.

Reeves discloses a vehicle safety sensor in which proximity sensors are provided on a truck or the like to determine whether the truck is too close to vehicles that surround the truck. These distances between the truck and the various objects will, of course, change as determined by the proximity sensors.

Nevertheless, it is respectfully submitted that Reeves fails to provide the missing teaching of Smith relating to calculating the distance between the transmitter and the receiver in order to determine whether the two vehicles are within a predetermined distance before providing the alarm to the user of the receiver vehicle, as taught by the present invention and as recited in the amended claims.

Reconsideration is respectfully requested of the rejection of claim 7 under 35 USC 103, as being unpatentable over Smith in view of Reeves and further in view of Hayashida et al.

Hayashida et al. relates to a navigation system in which prompts are given to the user at different time points based upon the kind of surface on which the vehicle is traveling. Nevertheless, Hayashida et al. does not disclose the feature of the present invention that is missing from Smith relating to calculating the predetermined distance, as taught by the present invention and as recited in the amended claims.

Reconsideration is respectfully requested of the rejection of claim 15 under 35 USC 103, as being unpatentable over Smith in view of Hayashida et al.

As noted hereinabove, although Hayashida et al. changes the time of giving prompts to the user based on the road surface, Hayashida et al. does not disclose the feature of the present invention relating to calculating a predetermined distance based on a detected current position and a transmitted position, as taught by the present invention and as recited in the amended claims.

Accordingly, by reason of the amendments made to the claims hereby, as well as the above remarks, it is respectfully submitted that a vehicular alarm system, as

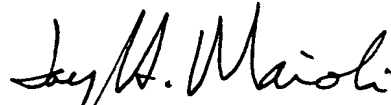
taught by the present invention and as recited in the amended claims, is neither shown nor suggested in the cited reference, alone or in combination.

The reference cited as of interest have been reviewed and are not seen to show or suggest the present invention as recited in the amended claims.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

COOPER & DUNHAM LLP

A handwritten signature in cursive script, reading "Jay H. Maioli".

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VERSION WITH MARKINGS TO SHOW CHANGES MADE
IN THE CLAIMS

Please amend claims 1, 2, and 9 by rewriting same to read as follows.

--1. (Twice Amended) An intervehicular alarm system for transmitting and receiving alarm information between a transmitting vehicle and a receiving vehicle,

wherein said transmitting vehicle includes:

detecting means for detecting position information of said transmitting vehicle; and

transmitting means for transmitting said position information and said alarm information; and

said receiving vehicle includes:

receiving means for receiving said position information and said alarm information transmitted from said transmitting vehicle;

means for determining a current position of the receiving vehicle;

output means for outputting said alarm information to a user of the receiving vehicle; and

control means for performing control [such that] of outputting said alarm information [is outputted from said output means when said control means determines] including means for calculating a distance between the receiving vehicle

and the transmitting vehicle based on the current position of the receiving vehicle and said transmitted position information and for determining that said transmitting vehicle is within a predetermined distance less than an effective range of said transmitting means from said receiving vehicle based on said [position information] calculated distance.

--2. (Twice Amended) The intervehicular alarm system as claimed in claim 1,

wherein when said control means determines that said transmitting vehicle is present within said predetermined distance said control means changes a direction of output of said alarm information [form] from said output means according to a direction of said transmitting vehicle with respect to said receiving vehicle.

--9. (Twice Amended) An alarm apparatus for use in an intervehicular alarm system, said apparatus comprising:

inputting means for inputting alarm information;

position detecting means for detecting a current position of a first vehicle of said apparatus;

transmitting means for adding said current position to said alarm information and transmitting resulting alarm information;

receiving means arranged in a second vehicle for receiving a signal including said current position information and said alarm information from [a second] said first vehicle;

position detecting means for detecting a current position of said second vehicle;

calculating means for calculating a distance between said first vehicle of said apparatus and said second vehicle based on said current position of said second vehicle and said position information corresponding to said current position of said first vehicle; and

output control means for outputting said alarm information when said output control means determines that said calculated distance is within a predetermined distance less than an effective range of said transmitting means.